



## Theories and Techniques in Intelligent Digital Twins in Marine Science and Engineering

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### Message from the Guest Editors

There are many scenarios where people will find it difficult to study and interact directly with real-world marine entities due to various physical limitations. Digital twins can easily bridge the gap between humans and the physical world across spatial and temporal dimensions. To create such intelligent digital twins, advanced theories and techniques should be explored in areas such as intelligent marine big data acquisition and processing, hardware and algorithms for intelligent data computing, and multi-modal enhanced data visualization, among others. This Special Issue will aim at consolidating views in recent trends and major challenges for those topics. We present a platform and forum to disseminate state-of-the-art research and trends in this context and help to exchange new thoughts and perspectives.

The Special Issue topics of interest include but are not limited to:

- Vision-based 3D modelling for marine applications;
- Multi-sensory based underwater 3D perception;
- Deep learning in data computing;
- Point-cloud manipulation and processing;
- Ubiquitous intelligence and computing for marine science;
- Digital twin in oceanology;
- Multi-modal data visualization.





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## Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (JMSE; ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

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